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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,231	02/03/2006	Roel Penterman	NL030981	9449
24737 7590 07/18/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
HON, SOW FUN				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
07/18/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/567,231

**Applicant(s)**

PENTERMAN ET AL.

**Examiner**

SOPHIE HON

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

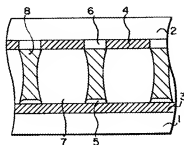
### ***Response to Request for Reconsideration***

1. This application has been re-assigned to a different examiner. Any inconvenience to the Applicant is deeply regretted.

### ***Rejections Repeated***

2. The 35 U.S.C. 103(a) rejection of claims 1-13 over Kondo are repeated for the same reasons previously of record in the Office action dated 01/08/08. Kondo teaches a polymeric stratified-phase-separated composite comprising a film of a liquid (crystal region 7, column 26, lines 45-55), supporting members formed of polymerized material (polymeric walls 8, column 26, lines 45-55) and extending through the film of the liquid, the polymeric stratified-phase-separated composite being provided, with its film of liquid side, on a substrate surface (substrate 1, column 26, lines 45-50) having in accordance with a predetermined pattern selected first region (thin film 5, column 26, lines 55-60) and second region, the first region being functionalized for selective accumulation of the polymerized material (thin film 5 formed in a non-pixel portion on the inner surface of the substrate 1, column 26, lines 55-60) and the second region being functionalized for selective accumulation of the liquid (surface free energy of the non-pixel portion is smaller than that of a pixel portion, column 26, lines 55-65), wherein the supporting members extend selectively onto the selected first regions (the photopolymerizable material collected on the thin film 5 in the non-pixel portions polymerized into a polymer, forming walls 8, column 27, lines 15-25). Fig. 1 of Kondo is shown on the next page.

**FIG. 1**



Kondo fails to teach in the inventive examples, a layer of polymerized material covering the film of liquid, from which the supporting members formed of the polymerized material would then extend.

However, Kondo teaches that modifications are within the scope of the invention (column 49, lines 32-38). Kondo discloses prior art where the polymerized material forms a layer covering the film of liquid, from which the supporting members formed of the polymerized material extend (Fig. 8A, column 4, lines 54-65). Introducing a modification where the polymerized material forms a layer covering the film of liquid, from which the supporting members formed of the polymerized material extend, would alter the orientation of the liquid layer, and provide a hybrid orientation, as is well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have modified the polymeric stratified-phase-separated composite of Kondo, where the polymerized material then forms a layer covering the film of liquid, from which the supporting members formed of the polymerized material extend, in order to obtain a hybrid orientation of the liquid layer, as is well known in the art. Kondo teaches that the selected first and second regions are regions of high and

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low affinity, respectively, for polymerizable material from which the polymerized material of the supporting members is obtained (the thin film is formed in order to make the surface free energy of the non-pixel portions smaller than that of the pixel so that the polymerizable material is collected in the non-pixel portion with ease, column 28, lines 30-40).

3. The 35 U.S.C. 103(a) rejection of claims 1-13 over Shimizu are repeated for the same reasons previously of record in the Office action dated 01/08/08. Shimizu fails to teach a layer of polymerized material covering the film of liquid, from which the supporting members formed of the polymerized material would then extend. However, Shimizu teaches that modifications are within the scope of the invention (column 17, lines 1-10). Introducing a modification where the polymerized material forms a layer covering the film of liquid, from which the supporting members formed of the polymerized material extend, would alter the orientation of the liquid layer, and provide a hybrid orientation, as is well known in the art.

4. The 35 U.S.C. 103(a) rejection of claims 1-13 over Onishi are repeated for the same reasons previously of record in the Office action dated 01/08/08. Onishi fails to teach in the inventive examples, a layer of polymerized material covering the film of liquid, from which the supporting members formed of the polymerized material would then extend. However, Onishi teaches that various modifications are within the scope of the invention. Onishi discloses prior art that teach that the polymerized material forms a layer covering the film of liquid, from which the supporting members formed of the polymerized material extend (Figs. 1A-1C, column 2, lines 55-60). Introducing a

modification where the polymerized material forms a layer covering the film of liquid, from which the supporting members formed of the polymerized material extend, would alter the orientation of the liquid layer, and provide a hybrid orientation, as is well known in the art.

5. The 35 U.S.C. 103(a) rejection of claims 1-13 over Nakao are repeated for the same reasons previously of record in the Office action dated 01/08/08. Nakao teaches a polymeric-phase-stratified composite comprising a film of a liquid, a layer of polymerized material covering the film of liquid and supporting members formed of the polymerized material and extending from the layer of polymerized material through the film of liquid, the polymeric stratified-phase-separated composite being provided, with its film of liquid side, on a substrate surface having in accordance with a predetermined pattern selected first and second regions, the first regions being functionalized for selective accumulation of the polymerized material and the second regions being functionalized for selective accumulation of the liquid, wherein the supporting members extend selectively onto the selected first regions (Fig. 1, polymer resin 4, liquid crystal 3, column 9, lines 22-35, substrate treated to control wettability, shape of uniform thickness, column 5, lines 28-32, 39-49).

### ***Response to Arguments***

6. Applicant's arguments have been fully considered but they are not persuasive. As detailed above, Kondo, Shimizu and Onishi allow for modifications, where introducing a modification where the polymerized material forms a layer covering the

film of liquid, from which the supporting members formed of the polymerized material extend, would alter the orientation of the liquid layer, and provide a hybrid orientation, as is well known in the art. Nakao teaches all the limitations of claims 1 and 11.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks, can be reached on (571)272-1401. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Sophie Hon/*

Sow-Fun Hon

/KEITH D. HENDRICKS/

Supervisory Patent Examiner, Art Unit 1794